WINTER FACE-TO-FACE RECAP FROM THE SMART GRID INTEROPERABILITY PANEL (SGIP)

Wednesday, December 12, 2012



Stepping Into the Future

Over 400 attendees, both in-person and remote, participated in our Winter Face-to-Face and Grid-Interop. Held in partnership with NIST, Clasma, GridWise Architecture Council and the Department of Energy, the conference sessions focused on what's working today and mapping out a future vision for standards and interoperability. For the second year, attendees viewed implementation and interoperability at work in the Plug-In, the industry's only cross-technology showcase of interoperability standards.

The week began with the SGIP Governing Board Meeting on Sunday evening and concluded with SGIP 2.0 Chair John McDonald providing the highlights in the Closing Plenary. While the goals and tasks of our working groups continued in individual breakouts, there were also new items on the agenda. Four plenary sessions were held to mark the important SGIP transition from 1.0 to 2.0. Other notable changes were the many SGIP 2.0 open committee meetings and a Board of Directors meeting.

- View photos from week.
- View session archived materials.
- <u>View attendee list</u>.
- Read more on Governing Board Meeting.

This meeting also officially marked the "passing of the torch" from SGIP 1.0 to 2.0, including a Memorandum of Understanding (MOU) signing on Tuesday between NIST and SGIP 2.0, Inc. as well as a Transitional Plenary that same afternoon to highlight accomplishments and recognize SGIP leadership.

SGIP 2.0 Specific Highlights

Grid-Interop 2012 hosted the first collection of public meetings for SGIP 2.0 and its five Board of Director Committees. John McDonald shared during the Closing Plenary that he was "very pleased with the level of member interest and Involvement" for the week. More than a dozen SGIP membership applications were received during the week.

- Executive Committee recently received several applications for the Executive Director position and will
 be reviewing those in the coming days. In addition, the group will issue an outsourced services request
 for proposals soon.
- **Technical Committee** is transitioning the PMO function and finishing their prioritization of tasks.
- Marketing & Membership Committee is discussing membership outreach, the 2013 Communications Plan and a 2013 meeting strategy. Meeting plans for 2013 will be announced soon by SGIP 2.0.
- Nominating & Governance Committee held lengthy discussion on the definition of "Good Standing" in

- the new structure and the treatment of volunteers during the transition period.
- Audit Committee is focused on the selection of an auditor, a key step to maintaining the organization's 501(c)(3) status.

Working Group Session Highlights

Over 20 of SGIP's working groups and committees took the face-to-face opportunity to discuss issues, accomplish tasks and reach consensus before the end of 2012. Here are a few report outs from the teams.

Smart Grid Architecture Committee (SGAC):

- Completed SGAC standard reviews of IEC 62351-4,-5,-6,-7,-8, ITU-T G. 9960, G.9961, G.9963 and NAESB Req-21 and REQ-22.
- Reached agreement on Service Oriented Architecture (SOA) baseline for Architecture activities
- Participants Wanted: There's an ongoing need for more experts to handle the standards reviews as well as a desire for more utility and solution-provider architecture involvement. Contact Stephan Amsbary (Stephan@enernex.com) if interested.

Smart Grid Testing & Certification Committee (SGTCC):

- Completed an updated draft of the Smart Grid Testing & Certification Landscape that will be finalized in early 2013 and used to support new deliverables.
- Completed the ITCA Development Guide and FAQs to aid in new test program formation.
- Developed an action plan for 2013 including an outreach plan to advocate for the adoption of testing programs in the product evaluation process.

Home-to-Grid Domain Expert Working Group (H2G DEWG):

- ANSI/CEA-2045, Modular Communications Interface for Energy Management, should become a standard by the end of this year.
- The group submitted CEA/CEB-29, "Installation Guide for Smart Grid Applications," as a candidate to the SGIP Catalog of Standards (CoS) entry process and also agreed to submit ISO/IEC 15067-3, "Model of a Demand-Response Energy Management System," as a CoS candidate.
- The H2G DEWG is considering a recommendation of utilizing the Radio Descriptive Service that sends song titles and artist data to FM radios for broadcasting smart grid price and event data.
- The group began a new project on "Integration of Supply/Demand in the Electric Energy Market" subtitled, "Economic and Market Drivers for Load Balancing" and is working with Pacific Northwest National Laboratory on "Demand Responsive Residential Appliances Interface with the Smart Grid."
- A joint meeting was held with the <u>Business & Policy DEWG</u> to focus on "Appliance & Demand Response."

Building-to-Grid (B2G) and **Industry-to-Grid** (I2G) Domain Expert Working Groups:

- The two groups met jointly to focus efforts on Commercial & Industrial issues and worked on several white papers to advance the C&I Roadmap.
- Held two discussions led by Japanese colleagues on the topic of Small C&I Integration into the Smart Grid and discussed the most recent draft of DR measurement and verification and how we might address in the SGIP.
- IEEE 1888 will have a criteria & analysis report reviewed and ready for review by the end of the year.

PAP-09 on Standard DR and DER Signals provided their final deliverables with the culmination of work including DR requirements development as well as input, review and recommendation for CoS inclusion of:

- OASIS Energy Interoperation
- OpenADR 2.0 Profiles A & B (view materials)
- Smart Energy Profile 2.0 (view materials)

As the recommended standards progress through the CoS consideration process, leadership will keep PAP stakeholders informed and call special meetings if needed.

PAP-15 on Power Line Communications will not meet for the remainder of December as they wait for the standards meeting results of IEEE P1901.2 and ITU-T G.hnem to take place in January next year. The team plans to resume regularly scheduled calls in February 2013.

PAP-19 on Wholesale Demand Response provided their final deliverables with the completion of the Wholesale Demand Response Communication Protocol (WDRCP) recommended extensions for IEC CIM as well as interoperation mapping and recommendation for CoS inclusion of:

- Demand Response aspects of MultiSpeak (supplemental to TnD DEWG recommendation)
- OpenADR 2.0 Profiles B (supplemental to PAP19 recommendation).

As the candidate standards progress through the CoS consideration process, leadership will keep PAP stakeholders informed and call special meetings if needed. View PAP19 <u>documents and presentations</u> from the Face-to-Face meeting.

Congratulations and Thank You to the PAP-09 and PAP-19 teams for all their efforts!

THANK YOU TO ALL WHO ATTENDED THE WINTER 2012 MEETING!

Upcoming Vote: Fourteen Possible for the Catalog of Standards

As decided in the Dec. 2nd Governing Board meeting, the Board is currently reviewing 14 standards for possible recommendation for the Catalog of Standards (CoS). The Board will close their vote on Dec. 31. Then voting is will open on January 7 for the Voting Representatives of Participating Members in Good Standing under SGIP 1.0.

The fourteen standards are noted below (materials are posted to the TWiki if you wish to learn more):

- NAESB REQ 21 Energy Services Provider Interface (ESPI) builds on the NAESB Energy Usage Information (EUI) Model and, subject to the Governing Documents and any requirements of the Applicable Regulatory Authority, will help enable Retail Customers to share Energy Usage Information with Third Parties who have acquired the right to act in this role. ESPI will provide a consistent method for Retail Customers to authorize a Third Party to gain access to Energy Usage Information.
- NAESB REQ 22 Establishes voluntary Model Business Practices for Third Party access to Smart Meterbased information. These business practices are intended only to serve as flexible guidelines rather than requirements, with the onus on regulatory authorities or similar bodies to establish the actual requirements.
- IEC 62352 Parts 1 7 -- The scope of the IEC 62351 series is information security for power system control operations. The primary objective is to "Undertake the development of standards for security of the communication protocols defined by IEC TC 57, specifically the IEC 60870-5 series, the IEC 60870-6 series, the IEC 61950 series, the IEC 61970 series, and the IEC 61968 series. Another objective is to undertake the development of standards and/or technical reports on end-to-end security issues.

- IEC 62351-1 Communication network and system security Introduction to security issues
- IEC 62351-2 Glossary of terms
- IEC 62351-3 Communication network and system security Profiles including TCP/IP
- IEC 62351-4 Profiles including MMS
- IEC 62351-5 Security for IEC 60870-5 and derivatives
- IEC 62351-6 Security for IEC 61850
- IEC 62351-7 Network and system management (NSM) data object models
- ITU-T G.9960 (Unified High-Speed Wireline-based Home Networking Transceivers System Architecture
 and PHY Layer Specification (G.hn/PHY)) specifies the system architecture and physical (PHY) layer for
 wireline based home networking transceivers capable of operating over premises wiring including inside
 telephone wiring, coaxial cable, and power-line wiring. It complements the data link layer (DLL)
 specification in Recommendation ITU-T G.9961.
- ITU-T G.9972 This Standard specifies a coexistence mechanism for networking transceivers capable of operating over electrical powerlines. The coexistence mechanism allows compliant devices on the same power line wiring to coexist with other devices implementing G.9972.
- NISTIR 7862 Power Line Communication (PLC) systems provide a bi-directional communication platform
 capable of delivering data for a variety of Smart Grid applications such as home energy management and
 intelligent meter reading and control. One benefit of applying power line communication on power grid is
 that it provides an infrastructure that is much more comprehensive and widespread than other
 wired/wireless alternatives. The use of PLC in the home network enables home appliances and home
 energy management systems to communicate with no additional wiring and minimal configuration by the
 home owners.
- IEEE 1901-2010 Defines a standard for high-speed communication devices via electric power lines, socalled broadband over power line (BPL) devices. This standard focuses on the balanced and efficient use of the power line communications channel by all classes of BPL devices, defining detailed mechanisms for coexistence and interoperability between different BPL devices, and assuring that desired bandwidth and quality of service may be delivered.
- AEIC Guidelines SmartGrid/AEIC AMI Interoperability Standard Guidelines for ANSI C12.19/IEEE
 1377/MC12.19 End Device Communications and Supporting Enterprise Devices, Networks and Related
 Accessories. The objective was to develop a smaller set of data Tables that meet the needs of most
 utilities and simplify the meter procurement process. Since the AEIC had already developed a "guideline"
 in 1998 to help utilities use the ANSI C12.19-1997 standard, the PAP05 WG accepted the AEIC offer to
 revise its guidelines to meet the objectives of this PAP. The AEIC/AMTI working team opened this effort
 to all interested parties, including non-AEIC members.

Once again, materials are posted to the TWiki if you wish to learn more.

To manage your email subscriptions to any of the SGIP listservs including this one, please visit smartgridlistserv.org.